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ABSTRACT

Recognizing the need for better preparation of high school students in mathematics, science, and technology, Delgado Community College and the Orleans Parish School System entered into an agreement for the provision of a summer enrichment program for minority students in grades 7 through 9 who had exhibited average or above average abilities in math and science. The 3-week program focused on improving math, problem-solving, and analytical skills; provided hands-on experience in computer manipulation; administered career interest surveys to determine students' math, science, and technological inclinations; and offered real-life experiences, field trips, and speakers. Topics covered included robotics, computer-assisted drafting, basic theory in radio communication, desktop publishing, and electrical systems. An evaluation of the program, based on conversations with the project director and students, observations of student-teacher interaction, and information on attendance, concluded that the project provided constructive enrichment activities that stimulated student interest in technology and technical careers. The budget for this program is included. Program advertisements, public relations information, and the evaluator's report are appended. (JMC)

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THE SEARS ROEBUCK FOUNDATION
PARTNERSHIP DEVELOPMENT FUND
KEEP AMERICA WORKING PROJECT

Title

Delgado Community College/Sears-Roebuck
Keeping America Working
Math, Science and Technology
Summer Youth Enrichment Program

Reference: 000470

JC 890 555

Final Report Submitted
To the
American Association of Community & Junior Colleges

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DELGADO COMMUNITY COLLEGE/SEARS-ROEBUCK KEEPING AMERICA WORKING
MATH, SCIENCE AND TECHNOLOGY
SUMMER YOUTH ENRICHMENT PROGRAM

PROGRAM OVERVIEW

Technology is the wave of the future. In order for America to continue to make significant technological advancement in the years to come, its students must become proficient in mathematics, science and technology. Recognizing the need for better preparation of students in the aforementioned areas, Delgado Community College and the Orleans Parish School System entered into an agreement for the purpose of providing a summer enrichment program for minority students who have exhibited average or above average abilities in math and science.

Originally, the program was intended to serve students in grades 7 through 12. However, because of the various academic levels of the students and limited funds, the program was developed for students in grades 7 through 9. Due to limited funds the original program schedule was modified to one (1) three (3) week session for 25 students (see attached program schedule). Through the use of an advisory committee with representatives from Delgado and the Orleans Parish Public Schools and assistance from faculty in the Engineering Division, a three-week program was developed to provide students with an enriched experience in math, science and technology.

In the final planning phase, three Delgado faculty members, the project director and two Orleans Parish junior high school

teachers refined the program. The Orleans Parish teachers were instrumental in identifying the students as well as assisting the college instructors in determining the level at which the course should be developed. Based on the interaction with the junior high school teachers, the Delgado faculty developed the course modules and the daily schedule of activities (see rotating schedule matrix appendix).

OBJECTIVES:

1. To provide minority students with an enriched experience in math (algebra, geometry, trigonometry and/or calculus).

2. To provide minority students with experiences that will enhance their problem-solving and analytical skills necessary in math, science and technology.

3. To provide minority students with hands-on experience in computer manipulation in various disciplines through CAI (Computer Assisted Instruction).

4. To provide career interest surveys to determine students' math, science and technological inclinations.

5. To expose students to real life experiences in m[illegible]n, science, and technology through field trips and speakers bureaus.

OUTCOMES:

1. **Students will have increased knowledge in math, science and technology.**

   ACTIVITY:
   During the three-week program, students were exposed to various aspects of math, science and technology through the classroom activities, tours and field trips. Exhibit I Program Agenda and Exhibit II Class Schedule reflects the day-to-day activities of the program.

2. **Students will have participated in activities geared toward improving their problem-solving and analytical skills.**

   ACTIVITY:
   Each class was designed to provide students with an opportunity to utilize their problem-solving and analytical skills through technical modules and exercises developed by each instructor.

3. **Students will have had hands-on experience in computer manipulation.**

   ACTIVITY:
   Students were exposed to computer assisted drafting, word processing, computer graphics, spreadsheets, etc. The computer labs were also available to the students beyond the length of the program.

4. **Students will have been administered a career interest survey.**

   ACTIVITY:
   Each participant was administered a career assessment inventory - vocational version. This assessment concentrated on skilled trades occupations. It is most often administered to individuals seeking career entry information after high school or some college. Four areas are included on the assessment - Administrative Indices; General Themes; Basic Interest Area Scales; and Occupational Scales. Exhibit III - Career Assessment Inventory Profile. The assessments were sent off to be electronically scored but because of the young ages (12-14) of the participants, the test coordinator advised us not to place a great deal of emphasis on the results. Nonetheless, this was a good and enjoyable experience for the participants.

EXHIBIT I

DELGADO COMMUNITY COLLEGE/SEARS-ROEBUCK KEEPING AMERICA WORKING
MATH, SCIENCE AND TECHNOLOGY
SUMMER YOUTH ENRICHMENT PROGRAM

WEEK ONE	
June 12 - June 16	Orientation Basic Computer Instruction Direct current and color Electrical system Video on Robotics Developing Current Flow Career Assessment Campus Tour
WEEK TWO	
June 19 - June 23	Computer Assisted Drafting Basic Theory in Radio Communication Basic Electrical Unit Bio-Medical Technology Delgado TV Studio Video Tape
WEEK THREE	
June 26 - June 29	Desktop Publishing Electrical Systems Delgado Computer Lab Delgado TV Studio Evaluation of Career Assessment

EXHIBIT II

DAILY SCHEDULE

	ARIZA	PLATT	SCHOFIELD
1:05-1:55	GROUP A	GROUP C	GROUP B
2:05-2:55	B	A	C
3:05-4:00	C	B	A

REEVES KENYA A FEMALE AGE=14 DATE SCORED 19-JUN-89 926 0023

Career Assessment Inventory Profile

[redacted]

I. ADMINISTRATIVE INDICES

RESPONSE PERCENTAGES

ACTIVITIES

L%	I%	d%	D%
20	18	26	23
33	18	49	

SCHOOL SUBJECTS

%	L%	I%	d%	D%
7	35	26	26	7
42	26	33		

OCCUPATIONS

%	L%	I%	d%	D%
3	14	19	22	42
17	19	64		

TOTAL RESPONSES	FINE ARTS-MECHANICAL	OCCUP. EXTROV-INTROV.
305	51	46

EDUC. ORIENT	VARIAB. OF INTERESTS
40	29

II. GENERAL THEMES

	SCALE	STD SCR	VERY LOW	LOW 35	AVERAGE 43–57	HIGH 65	VERY HIGH
R	REALISTIC	35	*				
I	INVESTIGATIVE	49					
A	ARTISTIC	51					
S	SOCIAL	54					
E	ENTERPRISING	41		*			
C	CONVENTIONAL	54					

III. BASIC INTEREST AREA SCALES

	SCALE	STD SCR	VERY LOW	LOW 35	AVERAGE 43–57	HIGH 65	VERY HIGH
R	ARTS/CRFTS OUTDOORS	30	*				
	ANIMAL SERVICE	51					
I	SCIENCE	51					
	NUMBERS	61				*	
A	WRITING	61				*	
	PERFORMING/ ENTERTAINING	47					
	ARTS/CRAFTS	34	*				
S	SOCIAL SERVICE	53					
	TEACHING	57				*	
	CHILD CARE	59				*	
	MEDICAL SERVICE	42		*			
	RELIGIOUS ACTIVITIES	69					*
E	SALES	[illegible]					
	MANAGERIAL	[illegible]					
	BUSINESS DETAIL	[illegible]					
	ADMINISTRATIVE	[illegible]					
C	MATHEMATICAL	[illegible]					*
	OFFICE PRACTICES	[illegible]					*
	MECHANICAL ACTIVITIES	[illegible]					
	COMPUTER OPERATIONS	[illegible]					

IV. OCCUPATIONAL SCALES

THEME CODE	OCCUPATION	STD SCORE	VERY DISS. 15	DISSIMILAR 25	MID-RANGE 44	SIMILAR 54	VERY SIMILAR	
RI	AIRCRAFT MECHANIC	11	*					
R	AUTO MECHANIC	9	*					
R	BUS DRIVER	7	*					
RI	CAMERA REPAIR TECH.	12						
R	CARPENTER	7	*					
RI	CONSERVATION OFFICER	1	*					
RI	DENTAL LAB. TECHNICIAN	19		*				
RI	DRAFTER	9	*					
R	ELECTRICIAN	11	*					
RS	EMERGENCY MEDICAL TECH.	16		*				
R	FARMER/RANCHER	22		*				
R	FIREFIGHTER	1	*					
RI	FOREST RANGER	1	*					
RC	HARDWARE STORE MGR.	1	*					
R	JANITOR/JANITRESS	14		*				
R	MACHINIST	1	*					
RC	MAIL CARRIER	9	*					
RIA	MUSICAL INST. REPAIR	22			*			
RI	NAVY ENLISTED	18						
RI	ORTHOTIST/PROSTHETIST	3	*					
R	PAINTER	3	*					
RI	PARK RANGER	1	*					
R	PIPEFITTER/PLUMBER	6	*					
RS	POLICE OFFICER	19		*				
R	PRINTER	12	*					
RI	RADIO/TV REPAIR	19		*				
RC	SECURITY GUARD	20		*				
R	SHEET METAL WORKER	1	*					
RI	TELEPHONE REPAIR	18						
RI	TOOL/DIE MAKER	1	*					
R	TRUCK DRIVER	9	*					
RI	VETERINARY TECHNICIAN	1	*					
IS	CHIROPRACTOR	19						
I	COMPUTER PROGRAMMER	51					*	
ISA	DENTAL HYGIENIST	7	*					
IR	ELECTRONIC TECHNICIAN	26			*			
I	MATH-SCIENCE TEACHER	36				*		
IR	MEDICAL LAB. TECHNICIAN	24			*			
IRS	RADIOLOGICAL TECHNICIAN	21		*				
IRS	RESPIRATORY THER. TECH.	9	*					
IR	SURVEYOR	18		*				
A	ADVER. ARTIST/WRITER	23			*			
AE	ADVERTISING EXECUTIVE	33				*		
A	AUTHOR/WRITER	27			*			
ASE	COUNSELOR-CHEM. DEPEND.	36				*		
A	INTERIOR DESIGNER	8	*					
AE	LEGAL ASSISTANT	39				*		
AI	LIBRARIAN	30			*			
A	MUSICIAN	34				*		
AE	NEWSPAPER REPORTER	26			*			
A	PHOTOGRAPHER	9	*					
ARI	PIANO TECHNICIAN	24			*			
SR	ATHLETIC TRAINER	4	*					
SA	CHILD CARE ASSISTANT	42				*		
SA	COSMETOLOGIST	18		*				
SA	ELEMENTARY SCHOOL TCH.	46					*	
SC	LICENSED PRACTICAL NURSE	29				*		
SC	NURSE AIDE	12		*				
SR	OCCUPATIONAL THER. ASST.	14		*				
SR	OPERATING ROOM TECH.	22			*			
S	PHYSICAL THER. ASSISTANT	17		*				
SI	REGISTERED NURSE	16		*				
ER	BARBER/HAIRSTYLIST	1	*					
EAS	BUYER/MERCHANDISER	25			*			
E	CARD/GIFT SHOP MANAGER	35				*		
ES	CATERER	24			*			
E	FLORIST	21		*				
ECS	FOOD SERVICE MANAGER	20		*				
ECS	HOTEL/MOTEL MANAGER	31				*		
ESC	INSURANCE AGENT	22			*			
E	MANUFACTURING REP.	7	*					
EAS	PERSONNEL MANAGER	43				*		
EA	PRIVATE INVESTIGATOR	39				*		
EC	PURCHASING AGENT	27			*			
E	REAL ESTATE AGENT	28			*			
EAS	RESERVATION AGENT	22			*			
ECS	RESTAURANT MANAGER	23			*			
EC	TRAVEL AGENT	40				*		
CE	ACCOUNTANT	52					*	
CE	BANK TELLER	33				*		
C	BOOKKEEPER	49					*	
C	CAFETERIA WORKER	9	*					
CE	COURT REPORTER	52					*	
CE	DATA ENTRY OPERATOR	47					*	
CS	DENTAL ASSISTANT	25			*			
CSE	EXECUTIVE HOUSEKEEPER	27			*			
CS	MEDICAL ASSISTANT	32				*		
CS	PHARMACY TECHNICIAN	39				*		
C	SECRETARY	47					*	
CS	TEACHER AIDE	49					*	
CSE	WAITER/WAITRESS	18		*				

R I A S E C

EXHIBIT III

NATIONAL COMPUTER SYSTEMS

P.O. Box 1294
Minneapolis, Minn. 55440
PHONE 800/328-6759
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5. **Students will have been involved in at least two real-life experiences related to math, science and/or technology.**

ACTIVITY:
The students were involved in several activities and trips and tours of sites related to math, science and/or technology areas such as: Martin Marietta Aerospace Center; Delgado Television Studio; Aircraft Maintenance Hangar; Automotive Repair; Welding Shop; Biomedical Equipment Lab; Academic Computer Labs and other technical laboratories.

Exhibit IV provides a breakdown of participants by race and sex. Each participant had a GPA of 2.5 or better. This was verified when students brought in their final grade report for review by the instructors and project director.

EXHIBIT IV
SEARS
PROFILE OF PROGRAM PARTICIPANTS

	MALE	FEMALE	TOTAL
BLACK	10	9	19
HISPANIC	1	3	4
TOTAL	11	12	23

SUMMARY

The success of Delgado Community College/Sears-Roebuck Keeping America Working - Math, Science and Technology Summer Youth Enrichment Program was twofold: 1) the funds provided minority youth (12-14 years of age) with an opportunity to participate in a program that increased their knowledge of math, science and technology, and 2) afforded the college for the first time the opportunity to offer a program of this magnitude and intensity for youths of this age. Although the program was

modified, the program objectives and outcomes were accomplished and the participants truly enjoyed every activity (Photos in Appendix).

Special thanks to Sears Roebuck and AACJC for allowing Delgado Community College this opportunity.

BUDGET

DELGADO COMMUNITY COLLEGE / SEARS - ROEBUCK KEEPING AMERICA
WORKING MATH, SCIENCE AND TECHNOLOGY SUMMER YOUTH
ENRICHMENT PROGRAM

JUNE 12 1989 TO JUNE 29,1989
CITY PARK CAMPUS
BUILDING 22 ROOM 103

BUDGET

INSTRUCTIONAL COST	
3 DCC INSTRUCTOR @ $700 EA.	$2100.00
COORDINATOR 2	
TWO ORLEANS PARISH SCHOOL	
TEACHERS @ 10.00 PER HR.	
4 HRS/DAY FOR 6 DAYS EA.	520.00
BOOKS, SUPPLIES,& MAT'LS	500.00
TRANSPORTATION	
DAILY TRAVEL FOR 25 STUDENTS	
TRANSPORTATION FOR FIELD TRIPS	660.00
*PROJECTOR DIRECTOR 3 % OF	
ANNUAL SALARY FOR ENTIRE	
GRANT PERIOD	1220.00
	$5000.00

IN-KIND CONTRIBUTION

PROJECTOR DIRECTOR ADDITIONAL	
7% DEDICATED TO PROJECT	$2615.00
Video Production- TV STUDIO	250.00
(VIDEO TAPE OF STUDENTS)	
COMMUNICATION PROFESSOR	250.00
(DEV. SCRIPT FOR VIDEO)	
TEST COORDINATOR (ADMINISTERED	
CAREER ASSESSMENT)	150.00
	$3265.00

APPENDICES

A. PROGRAM ADVERTISEMENTS
AND PUBLIC RELATIONS INFORMATION

B. PHOTOS OF PROGRAM PARTICIPANTS

C. EVALUATOR'S REPORT

DELGADO COMMUNITY COLLEGE
Executive Offices

A Comprehensive Community College

501 City Park Avenue
New Orleans, Louisiana 70119-4399

James A. Caillier
President

June 8, 1989

To: *All Parents*

From: *Margaret D. Montgomery, Director of the Delgado/Orleans Math, Science and Technology Summer Youth Program*

On Monday, June 12, 1989 all participants in the Math, Science and Technology Youth Enrichment Program should report at 1:00 p.m. to:

DELGADO COMMUNITY COLLEGE
615 City Park Avenue
New Orleans, Louisiana 70119
Building 22 - Room 103

At this first meeting, all students will receive a schedule of program activities, permission slips for field trips and information about daily transportation.

If you have any questions, contact Margaret D. Montgomery at **483-4400.**

MATH, SCIENCE AND TECHNOLOGY
YOUTH ENRICHMENT PROGRAM
AND
NEW ORLEANS
PUBLIC SCHOOLS

MATH, SCIENCE AND TECHNOLOGY
Youth Enrichment Program

DELGADO COMMUNITY COLLEGE
AND NEW ORLEANS PUBLIC SCHOOLS

This summer enrichment program is designed for 8th grade students who have a 2.5 grade point average or better and who have an interest in mathematics, science and technology.

In this three week intensive program, students will explore the wonderful world of science and technology, in such areas as:

- CAD - Computer Assisted Drafting
- Computer Literacy
- Electronics
- Desktop Publishing

This free program will be held June 12, 1989 through June 29, 1989. Classes are Monday through Thursday, from 1 p.m. to 4 p.m.

For more information, contact _____ at _____.
Name Phone

Delgado Community College and New Orleans Public Schools
AACJC/SEARS SUMMER YOUTH PROGRAM

Name: _____

Home Address: _____

Telephone Number: _____

School: _____

School Address: _____

Parent/Guardian: _____

Birth Date: _____

Person to contact in case of an emergency: _____

Dr. James A. Caillier, president of Delgado Community College, (left) accepts a $5,000 check from Sears-Roebuck Foundation Partnership Development Fund, presented by Dave Davis, regional personnel manager for Sears. The college will use the funds to provide enrichment for minority students from Orleans Parish schools in grades 7 through 12 who have grade point averages of 2.5 or above in mathematics and science.

For information: Deborah Kohler
483-4116

DAK/10/12/88

DELGADO COMMUNITY COLLEGE

James Caillier
[redacted]
Science, [redacted] program.
The college will provide [redacted]
students from the Orleans Parish schools [redacted] 7-12
with GPA's of 2.5 or abov[redacted] and Science.

FOX VALLEY TECHNICAL COLLEGE

Stanley J. Spanbauer
Appleton, WI 54913
Description: Quality Concepts Application to Secondary Schools. This project will train 25 secondary school administrators, principals, board members, and CEO's of local businesses on quality concepts (FVTC's quality model) through discussions, workshops, and curriculum development within a twelve month period improving the management and operations of five secondary school systems within their demographic service area.

JOLIET JUNIOR COLLEGE

Raymond A. Pietak
Joliet, IL 60436
Description: Turning Dreams of Small Business Ownership into Reality. Joliet Junior College will showcase local financial institution's commitment to community economic development. This innovative partnership will provide entrepreneurs, who traditionally experience equity problems in small business loan acquisition, with an alternative source of start-up funding.

SALEM COMMUNITY COLLEGE

Philip O. Barry
Carneys Point, NJ 08069
Description: Estabishment of a Business Training Center and Development of Partnerships with Local High Schools and Businesses. Salem will provide individualized, self-paced, flexibly scheduled, competency-based instruction to prepare students for entry level and advanced employment in business offices. This partnership will involve local high schools, area businesses, and industry.to ensure continuity and pertinence of instruction.

SOUTHWESTERN OREGON COMMUNITY COLLEGE

Robert L. Barber
Coos Bay, OR 97420
Description: A Partnership for Part-time Employee Education and Training. Southwestern Oregon plans to develop education and training options for part-time workers. Using resources from business, industry, and educational agencies, the college will develop training packages keyed to the training needs employees idenfity.

TYLER JUNIOR COLLEGE

Raymond M. Hawkins
Tyler, TX 75711
Description: Articulated nursing curricula between Tyler Junior College and the University of Texas at Tyler. Tyler Junior College and the local branch of the University of Texas will develop an articulated nursing program in order to stimulate student enrollment in this area. The program will especially attempt to attract the unemployed to this field by providing and mareketing a linear program of study.

WEST HILLS COLLEGE

Stanley R. Arteberry
Coalinga, CA 93210
Desciption: Rural Vocational/Technical Education Partnership with Rural Area High Schools. This results-oriented project is designed to provide a coordinated vocational/technical educational articulation program between West Hills College and rural high schools within a five-county, 5,076 square mile area in central California.

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THE SEARS ROEBUCK FOUNDATION
PARTNERSHIP DEVELOPMENT FUND
KEEP AMERICA WORKING PROJECT

Title

Delgado Community College/Sears-Roebuck Keeping America Working Math, Science and Technology Summer Youth Enrichment Program

An Evaluation Report Submitted
to the
American Association of Community & Junior Colleges

Dr. Ted J. Alexander
July, 1989

Delgado Community College
Math, Science and Technology Youth Enrichment Program

Delgado Community College originally proposed a summer youth enrichment program for minority students from the Orleans Parish schools in grades seven through twelve with GPA's of 2.5 or above in math and science that was to have focused on developing problem solving and analytical reasoning skills in math, science and technology. The project was modified to a three-week session with three three-hour classes in three different technology areas provided for minority students. The thrust of the revised proposal was to emphasize and provide some orientation for technical careers and to stimulate a greater interest in technical careers instead of the traditional path of liberal and baccalaureate degree orientation. One hope of the staff at Delgado was that this program activity would "dove-tail" into other (two plus two tech prep program - JTPA career orientation) program activity which was also conducted at that site.

More than adequate preparation for this activity was provided under the leadership of the project director, Margaret Montgomery. Good communication with the lead instructors at the two junior high schools was helpful in identifying the students who were to participate in the program activity.

On-Site Visit

As a part of my visit to Delgado to evaluate this program, information about the students was made available to me and I was able to discern that this was a true partnership between the community college and the community at-large. In this metropolitan area, it is very difficult for students to find constructive activity during the summer, and there was collaboration on the part of the Delgado officials involved with the administration of this project that there was a keen, competitive interest on the part of the students, (eighth and ninth graders at two junior high schools in the general proximity of the college), for participation in this program. I was able to determine that all of the students participating had a minimum of 2.5 GPA and that the main thrust of the program activity was to stimulate interest in technical careers. I do feel that the time structured for the length of the program, three weeks, did provide adequate opportunity for some intensive career exploration.

In addition to reviewing specific information about each student, I had an opportunity to view, by means of video tape, each student expressing in their own words, their feelings regarding participation in this project. I had an opportunity to document that Delgado was using members of their own staff who had assumed instructional responsibility for the classes being taught and

that the advisors (two junior high teachers who served in a supervisory and advisory capacity) were from the junior high schools from which the students were selected.

I had an opportunity to talk to the supervisors, to approximately fifty percent of the class participants (selected at random) and to the people at Delgado directly involved with administration of the project.

I did observe the students in a class setting, saw the interaction that was taking place between the instructor and the students, and had an opportunity to question students individually. I was able to determine that there was unanimous agreement on the part of the students that the activity had been meaningful to them. During my visit, particularly in the two electronics classroom and lab situations (one theoretical, one practical), I was able to ascertain that there was positive, constructive interaction between the instructors, the supervisors, and the students.

Another indicator of the satisfaction with the program activity was that approximately seventeen out of the twenty students were present for a majority of the program activities even though attendance was not mandatory on a daily basis for all three weeks. At the site, the students exhibited curiosity, they were attentive, volunteered for different segments of participation in class activity and there was constructive interaction between the instructors and the students.

The three Delgado staff members who were serving as instructors for forty-five contact hours of work with the students exhibited a sense of humor, they were capable of carrying out their classroom responsibilities and were certainly knowledgeable of the subject matter. In two of the classes I visited, they were engaged in problem solving activities utilizing electronics instrumentation and microcomputers. The project director, Margaret Montgomery, is forwarding to me a post-program survey that is being utilized as an additional indicator of student accomplishment and satisfaction with this summer youth enrichment program.

Budget

The original proposed budget for this project activity (total direct cost) was $15,000.00. However, an allocated budget of $5,000.00 brought about the necessity of reducing the length of the program and the range of grades that could be accommodated for a shorter period of time. Information made available to me at the site of the project and documentation through conversation with the instructors indicates that these dollars were utilized for the purpose for which they were budgeted.

Additional institutional support for this project has been made available through Delgado Community College through in-kind resources and other support activity. In addition, to the specific objectives outlined in this proposal, the students have

been given access to other dimensions of resources at the college and have had full access to related facilities and personnel which have utilized in support of this program activity. This project could not have been carried out without funding from the Partnership Development Fund.

Accomplishment of Program Objectives

The following are the objectives specified in the revised proposal forwarded to AACJC, PDF:

1) To provide minority students with an enriched experience in math (algebra, geometry, trig and/or calculus).

2) To provide minority students with experiences that will enhance their problem-solving and analytical skills necessary in math, science and technology.

3) To provide minority students with hands-on experience in computer manipulation in various disciplines through CAI (Computer Assisted Instruction).

4) To provide career interest surveys to determine students math, science, and technical inclinations.

5) To expose students to real life experiences in math, science, and technology through field trips and speakers bureaus.

I am satisfied that three primary objectives of this project activity were met in full. One hundred percent of the students were minority students, and, through the efforts of Delgado Community College and their personnel involved in teaching these students, program objectives one, two and three were fully met, and I did have an opportunity to question the students and to observe them participating in experiences that I feel will enhance their problem-solving and analytical skills. I personally observed these students participating in CAI and instrumentation experiences in two of three program activities in which they were engaged on a daily basis. As for program objective number four, a copy of the career interest survey which is being forwarded to me will be made available to you after I have received this from Margaret Montgomery. As for program objective number five, the students, during the course of the time that they participated in this activity did have speakers to visit with them and their last field trip experience, a trip to Martin-Marietta Aero Space Industries, was completed the last week of this three-week program. The purpose in the visit to Martin-Marietta was to give them an opportunity to observe some of the technical program activity at that site as well as to provide additional career interest in technical and technology related fields of endeavor.

Evaluation Procedure

Through conversations with Margaret D. Montgomery, project director, prior to the visit, I was able to determine that the original project was modified to encompass a shorter period of time, in more intensive activities, with a smaller group of minorities in the New Orleans metropolitan area, specifically, two junior high schools contributing twenty students, grades eight and nine. The modification of the project, as specified above, did not, in my opinion, significantly affect the program objectives, and I have determined that the major goal of this activity, i.e., to provide students with an enriched experience in math, science, and technology, has been met.

During the course of my evaluation of this project, I questioned, at length, the project director, the vice president associated with this project at Delgado Community College, the staff members who were employed to work with the students in classroom and lab situations, the supervisors from the junior high school, and the students. I verified the existence of the software for the computer-assisted drafting programs, the technical instruments and instrumentation utilized in the theoretical and practical aspects of the technology offering and observed the students in classroom and lab situations where they interacted with each other and with those staff members and supervisors responsible for this project activity.

Summary

The Sears Partnership Development Fund provided an opportunity for these minority students to increase their knowledge in science, math, and technology. The students did, indeed, participate in those activities which were specifically structured to assist in improving their problem-solving and analytical skills. I did observe the students in hands-on experience in computer manipulation and use of certain instrumentation in a laboratory situation. The students have been administered a career interest survey which I will forward to you after I receive it. The students were involved in more than two real life experiences related to math, science and/or technology, and it was obvious, after having conversed with the students involved in this project activity, that this project was a constructive enrichment activity and will assist in stimulating their interest in technology and technical careers.

I was particularly struck with the interest that the project director and administrative staff at Delgado Community College had in the students and in their desire that this be a positive learning experience. I was also impressed with the fact that incentives were provided for superior student attainment rather than any penalties being applied in terms of a pass-fail situation. The staff took care not to place a great deal of traditional academic stress on these junior high school students and were intently interested in this being a positive learning expe-

rience. To the best of my ability to make a determination almost all of the program goals were realized to some extent. Some were fully realized.

I would suggest that additional emphasis, if possible, be provided in encouraging submission of this or similar project activity. I think it holds great promise in stimulating additional interest in technology and technical careers among students who otherwise would not have this type incentive available.

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